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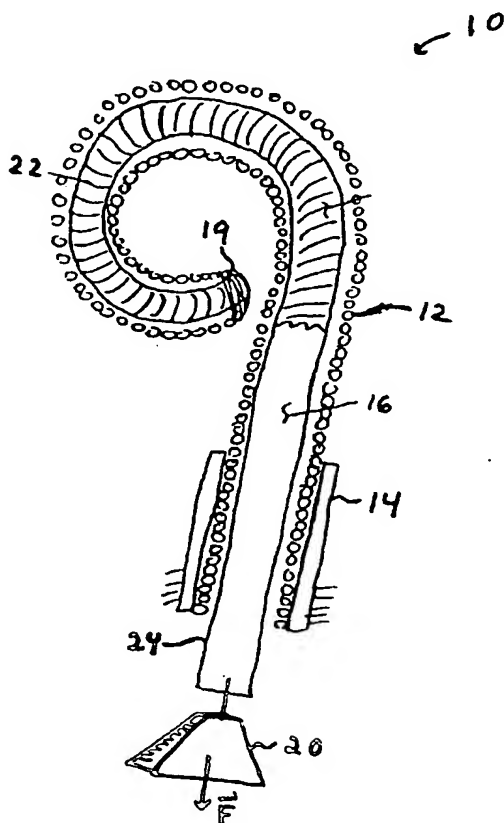
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(54) Title: **TEMPERATURE-CONTROLLED ACTUATOR**



(57) Abstract: A temperature-controlled actuator has a housing (12) with a proximal end and a moveable distal portion. A core-wire (16) extends along the housing, with its distal section anchored to the distal portion of the housing. The core-wire's distal section has an austenite state and a martensite state. The distal section moves the distal portion by transitioning between the austenite and martensite states in response to a temperature change along a thermometric section (22, 24) of the core-wire. A proximal section in mechanical communication with the core-wire's distal section transmits tension, provided by a tensioning element (20), to the distal section. The tensioning element, which is coupled to the proximal section of the core-wire, constantly applies a tensioning force to the core-wire.

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